



HANFORD UPDATE

A Bulletin on Hanford cleanup and compliance

May 2001



HR-3 Pump & Treat

U.S. Environmental Protection Agency Five-Year Review

EPA has conducted the first five-year review of the remedial actions implemented at the four National Priorities List (NPL) sites at the Hanford Site. The four NPL sites are the 100 Area, 200 Area, 300 Area, and 1100 Area. The purpose of the five-year review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in a five-year review report. Only those sites listed as past-practice units in the Tri-Party Agreement are covered in this five-year review report. Active treatment, storage, or disposal units (such as the Hanford Site tank farms) are not part of this review.

Most of the findings from the review involved improvements to the groundwater cleanup actions. Groundwater cleanups, generically, are the most complex Superfund actions. Additionally, the five-year review included a DOE commitment to produce a Hanford Sitewide plan for institutional controls.

EPA received several public comments during the February 2001 comment period. The responses to the comments are included in an appendix to the review report that can be downloaded from the EPA internet site at <http://yosemite.epa.gov>. Alternatively, printed copies are available from Larry Gadbois, EPA, at 509-376-9884 or by e-mail at Gadbois.Larry@epa.gov.

Record of Decision for 300 Area Cleanup Completed

The Tri-Parties (DOE, EPA, and Ecology) have recently completed the interim record of decision for the 300-FF-2 Operable Unit, thus completing the remedy selection process for soil and groundwater cleanup at the 300 Area NPL site. This record of decision is an important part of Hanford's Columbia River corridor cleanup effort and will facilitate the ultimate reduction of the footprint of the Hanford Site.

The 300 Area is located adjacent to the Columbia River and one mile north of the Richland city limits. Wastes generated by 300 Area operations were disposed of in a series of unlined trenches, ponds, and burial grounds. The primary contaminant of concern is uranium. This record of decision is an interim source control action that addresses 47 soil contamination areas and 9 burial grounds, including the 618-10 and 618-11 burial grounds that received mixed, low-level, and transuranic wastes from the 300 Area in the 1950s and 1960s. The cost for cleanup of these two burial grounds alone has been estimated at \$360

million. In addition, many buildings and structures will have to be removed first to facilitate the cleanup of contaminated soil. The selected remedy will involve removing contaminated soil and debris, treating them as necessary to meet waste acceptance criteria, and then disposing of them in Hanford's Environmental Restoration Disposal Facility or in New Mexico's Waste Isolation Pilot Plant.

Cleanup of the 300-FF-2 Operable Unit is estimated to cost \$512 million and must be completed by the Tri-Party Agreement milestone date of September 30, 2018. Soil cleanup standards were developed to be consistent with the reasonably anticipated future land use for this portion of the Hanford Site (industrial) and to meet groundwater and river protection standards. The 300-FF-2 Operable Unit record of decision can be downloaded or viewed at

<http://yosemite.epa.gov/r10/cleanup.nsf/webpage/Hanford,+Washington>.

For more information, please contact Mike Goldstein, EPA, at (509) 376-4919.

Fiscal Year 2003 Budget Meetings

Each year the U.S. Department of Energy (DOE) seeks public input in the development of its environmental management budget. The DOE Richland Operations Office (RL) and Office of River Protection held public workshops and meetings throughout March 2001 on the proposed fiscal year (FY) 2003 budgets.

The budget workshop, held in Richland, Washington, focused on the FY 2003 budget process, work scope, and the estimated cost of the work planned for FY 2002 and 2003. Breakout sessions allowed the public to ask specific questions and provide feedback to RL. The U.S. Environmental Protection Agency

(EPA) and the Washington State Department of Ecology (Ecology) were also on hand to provide their perspective and concerns regarding the FY 2002 and FY 2003 budgets and priorities.

The three agencies also held public meetings in Portland and Hood River, Oregon; and Seattle and Richland, Washington. In these public meetings, local citizens expressed their concern about funding shortfalls and the urgency to clean up the Hanford Site, as well as the need to protect public health and safety and the Columbia River. For more information, please contact Rich Holten, RL at (509) 376-3963.

Interim Removal Action for Hanford's B Reactor

A draft engineering/evaluation and cost analysis for the B Reactor has been prepared by RL for public review and comment. This assessment identifies all appropriate hazard mitigation requirements and costs to make the facility available for public access and preserve the facility for public interpretation. The draft engineering/evaluation and cost analysis has been prepared to cover a 10-year period, and evaluates three options for the B Reactor: 1) No Action; 2) Surveillance and Maintenance; and 3) Hazard Mitigation for Public Access.

The draft engineering/evaluation and cost analysis will be available for public review from June 18 through July 17, 2001. A public meeting will be held on Tuesday, June 26 from 7:00 – 9:00 p.m. at the Richland Public Library in Richland, Washington, to allow the public to discuss the proposed actions. At the conclusion of the public comment period, a preferred alternative will be selected by EPA and DOE, and an action memorandum prepared. For additional information, please contact Chris Smith, RL, at (509) 372-1544.



Hanford's B Reactor

Hanford Sitewide Permit

Ecology has received public comment on one modification to the Hanford Sitewide permit and is preparing to request public comment on another modification. Opportunities to comment on changes to the corrective action portion of the permit ended with the close of the comment period on April 6, 2001. Ecology is now working on a responsiveness summary to be issued upon acceptance of the modification package. The changes were made as a result of a settlement

between the DOE and Ecology of an appeal to an earlier modification package.

Incorporation of the 222-S Laboratory Complex into the sitewide permit will be the focus of the next modification, Mod F. Mod F will be the latest of the annually scheduled changes made to the sitewide permit. The 222-S Laboratory is currently operating under interim permit status and must follow all of the dangerous waste

regulations. Once the 222-S Laboratory is added to the sitewide permit, specific unit conditions will apply.

The time for public comment on the Mod F modification has not been determined; however,

the public will be notified prior to the public comment period. For additional information, please contact Brenda Becker-Kahleel, Ecology, at (509) 736-3003.

Air Operating Permit

Ecology and the Washington Department of Health have issued a Proposed Air Operating Permit for the Hanford Site. The proposed permit was developed following public comment on the draft permit. Ecology and Health received nearly 400 comments on the draft permit during the public comment period in late January and early February 2001. The comments included requests for minor wording changes, suggestions for clarifying permit conditions, and requests for changes to the permit from the permittee. Ecology and Health agreed with many of the comments and made the appropriate changes; in

cases where the regulators did not agree with the comments, they provided an explanation as to why the suggestion was not being implemented. The proposed permit has now been submitted to EPA for review. Following this process, additional changes may be made before the permit is issued in final form. The response to comments summary for the draft permit, and the proposed permit can be viewed at <http://www.ecy.wa.gov/>.

For additional information, please contact Oliver Wang, Ecology at (509) 736-3040.

Interim Safe Storage of 100-F and 100-H Reactors and Handling of Spent Nuclear Fuel

The DOE is in the process of putting the 100-F and 100-H Reactor facilities into interim safe storage. Safe storage involves decontaminating and decommissioning the facilities up to the shield walls that surround the reactor blocks, disposing of the contaminated waste at the Environmental Restoration Disposal Facility, and constructing safe storage enclosures over the reactor blocks. Interim safe storage will also include cleanout of the fuel storage basins. In the 1970s, the reactor fuel storage basins were partially drained and backfilled with soil and contain fuel buckets, fuel spacers, and process tubes left behind after deactivation. Additionally, it is possible that a small amount of

spent nuclear fuel will be discovered close to the fuel storage basin floors during the backfill cleanout process. Based on previous cleanouts of six fuel storage basins with similar designs, up to five spent nuclear fuel elements may be discovered in each of the fuel storage basins.

Any spent nuclear fuel discovered during the cleanout process will be transported to the K Basins for storage and eventual disposition with the K Basins spent nuclear fuel. The K Basins are ready to receive the spent nuclear fuel and personnel will follow the appropriate disposition procedures. For additional information, please contact Chris Smith, RL, at (509) 372-1544.



HANFORD UPDATE

Hanford Public Involvement Activities

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| June 7-8 | 9:00 a.m. – 5:00 p.m. (June 7); 8:30 a.m. – 4:00 p.m. (June 8)
Hanford Advisory Board
West Coast Hotel, 1101 N. Columbia Center Blvd, Kennewick, WA
Contact: Gail McClure, DOE-RL (509) 373-5647 |
| June 26 | 7:00 - 9:00 p.m.
Public Meeting on Hanford's B Reactor
Richland Public Library, 955 Northgate Drive
Richland, Washington
Contact: Chris Smith, DOE-RL, (509) 372-1544. |

Hanford Update

Department of Energy
P.O. Box 550 MSIN A7-75
Richland, WA. 99352

Historical Note : The U.S. Department of Energy's Richland Operations Office manages the Hanford Site in southeastern Washington State. Hanford was established during World War II as part of the top secret Manhattan Project to produce plutonium for nuclear weapons. Weapons material production was halted in the late 1980s. The Hanford Site is now engaged in the world's largest cleanup effort to deal with the legacy of radioactive and hazardous wastes that resulted from the plutonium production era. The U.S. Environmental Protection Agency and the Washington State Department of Ecology regulate Hanford's cleanup program under a long-term compliance contract called the Tri-Party Agreement. This agreement sets the framework and timelines on the cleanup work so that Hanford meets environmental standards. Hanford cleanup is focused on three outcomes: restoring the Columbia River Corridor for other uses, transitioning the Central Plateau to long term waste treatment and storage, and preparing for the future.